

Department of Environmental Health

**ENHL 301
Environmental Health and Sustainable Development
[1 credit]**

**Course Syllabus
Fall Semester AY 2023-2024**

Class time and Venue:

Section 1: Tuesday 9:00-10:15 AM, Vandyke building, Room 203

Section 2: Tuesday 2:00-3:15 PM, Vandyke building, Room 101

Office Hours: Monday and Friday 11:00-12:00noon OR BY Appointment

Course Instructors and Contact Details:

Name: Dr. Mey Jurdi

Email: mjurdi@aub.edu.lb

Course Description:

The course introduces the field of environmental health and highlights its role in contributing to sustainable development. Students discuss the environmental system and the interactions of its physical, socio-economic and political components affecting human health and ecologic vitality. Emphasis is placed on assessing, preventing, and controlling environmental hazards that pose major risks to humans, animals and ecosystems.

Course learning Objectives

By the end of the course, students will be able to:

LO1. Explain the environmental system and its interactions within the socio-economic and political context.

LO2. Identify approaches for assessing, preventing and controlling environmental hazards that pose risks to humans, animals and ecosystems.

LO3. Discuss the interlinkages between health, environment and sustainable development through exploring the targets of the relevant sustainable development goals.

LO4. Appraise the interplay between Environmental Health and other Public Health Disciplines

Council on Education for Public Health (CEPH) Foundational Learning Outcomes mapped to ENHL 301

- **FLO7.** Explain effects of environmental factors on a population's health
- **FLO12.** Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g. One Health)

Essential Skills

- **Essential Skill 1: Critical thinking**
- **Essential Skill 2: Time Management**

Course Learning Objectives mapped to CEPH competencies

Table 1. Mapping of course LO to CEPH competencies

	LO1	LO2	LO3	LO4
FLO7. Explain effects of environmental factors on a population’s health	X	X	X	X
FLO12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (eg, One Health)	X	X	X	X

Assigned Text Book and Readings (if applicable)

Useful References:

Section One: The Environmental System:	
1A	Purdon, P.W (2013). Environmental Health (Chapter 1: Environment and Health. Page 1-24). Academic Press.
1B	Frunkim, H. Ed. (2016) “Environmental Health from Global to Local (Chapter 2: Ecology and Ecosystems as Foundation of Health. Page 27). 3rd Edition, Jonney Wiley & Sons.
1C	Frunkim, H. Ed. (2016) “Environmental Health from Global to Local (Chapter 10: Environmental Health Ethics. Page 231). 3rd Edition, Jonney Wiley & Sons.
1B	Cutter, S.L., Boruff, B. J.,and Shirly, W. L. (2003).“Social Vulnerability to Environmental Hazards”. Social Science Quaternary 84(2): 242-261. Available at: https://www.jstor.org/stable/pdf/42955868.pdf?refreqid=excelsior%3A5ffdca3885f8a361a6e13b6e37989d59&ab_segments=&origin=
Section Two: Environmental Protection and Sustainable Development:	
2A	United Nations (2015). “The Millennium development Goals 2015”. Available at: http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf
2Ai	United Nations (2015). “About the Sustainable Development Goals” Available at: https://www.un.org/sustainabledevelopment/sustainable-development-goals/
2B	UN 2021. “The Sustainable Development Goals Report 2021” Available at: https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf
Section Three: Environmental Assessment and Management Tools:	
3B	Sar Sarraf, M., Larsen, B. and Owagan, M (2004). “Cost of Environmental Degradation: The Case of Lebanon and Tunisia”. The World Bank, Washington DC. Available at: http://www.meo.gov.html
3Bi	MoE/UNDP (2019). Rapid Cost of Environmental Degradation 2018. file:///C:/Users/mjurdi/Downloads/MOE%20Lebanon%20Rapid%20COED%202018%20(5).pdf
3C	Cannaos, C., and G. A., Onni (2019). Methodological Approach on the Procedural Effectiveness of EIA: the case of Sardinia. City Territ Archit 6, 1 (2019). Available at: https://doi.org/10.1186/s40410-019-0100-5

3D	Hilgenkamp, R. (2016). “Environmental Health Ecological Perspective (Chapter 6: Environmental Risk Assessment and Interventions. Jonnes and Barlett Publishers. Massachusetts, USA, Pages 98-111).
3E	Yale Center of Environmental law and Policy (2022). “Environmental Performance Index 2020” Available at: https://epi.yale.edu/epi-results/2022/component/epi
3F	Ju Jurdi, M et al (2012). Environmental Degradation: the Challenge of Sustaining Life in Jabour et al (ed.) Public Health in the Arab World. Cambridge University Press Chapter 4: Pp 47-59.

All Lecture Material (Slides) will be posted on Moodle a week before so kindly read slides before class time. The course will also use an assortment of educational resources including: publications, reports, white papers, videos and case studies. All course readings, except for book chapters, will be posted on Moodle according to the weekly topic and reading schedule. It is the responsibility of students to access the Moodle and download/ print the course readings as per the weekly schedule.

Course requirements and Student evaluation:

Student Evaluation:

Table: 2 Summary of students' assessments mapped to course learning objectives

	Learning Objectives			
	LO1	LO2	LO3	LO4
VIIA: Class Contribution	X	X	X	X
VIIB: Assignment 1	X			X
VIIC: Assignment 2	X		X	
VIID: Assignment 3	X	X		

Table: 3 Description of Assessment methods, Due Dates and Corresponding Learning Objectives

Assessment method	Date (tentative)	Grade percentage
VIIA: Class Contribution		10%
<p>Class Attendance: Essential to understand and analyze course content. Class Contribution: Lectures will be followed by a discussion session/case study/ practical application, as such your contribution will be assessed. Students are expected to contribute to the activities based on reading the assigned references, posted slides and following class presentation. Additionally, students may be volunteered to reflect on their thoughts relating to the specified issue.</p>		
Assignment 1	September 24	20%
<p>Interplay between EH and other Public Health Disciplines (Brief comprehensive summary of 1-2 pages) Upon completing section I you will submit assignment 1 that should: 1a. Comprehensively reflect on the interplay between environmental health and the other public health disciplines 1b. Present the importance of addressing environmental health issue relating to your public health practice in the specified area of MPH concentrations.</p>		

Assessment method	Date (tentative)	Grade percentage
Assignment 2	<i>October 22</i>	<i>40%</i>
Environmental Factors Underlying SDGs (Brief comprehensive report and class presentation of 15 minutes) Upon completion of Section IIA-B students will submit a brief report on major environmental challenges that needs to be addressed in meeting the targets of a one specified SDG (SDS 1, 2, 3, 6, 7,8,11, 12, 13, 14, 15...).		
Assignment 3	<i>December 5</i>	<i>30%</i>
Environmental Performance assessment of a specified country (brief analytical assessment report 3-4 pages) Upon the completion of Section I, II, and III should will submit an analytical report on the environmental performance of one country of choice reflecting on progress in the areas of environmental health and ecosystem vitality.		

All Detailed Instruction for Assignments One/Two/Three will be posted on Moodle at least 2 weeks before due date.

Policies and other General Notes:

Students with Special Needs

If you have documented special needs and anticipate difficulties with the content or format of the course due to a physical or learning disability, please contact me and/or your academic advisor, as well as the Counseling Center in the Office of Student Affairs (Ext. 3196), as soon as possible to discuss options for accommodations. Those seeking accommodations must submit the Special Needs Support Request Form along with the required documentation.”

Academic Integrity

The American University of Beirut has a strict anti-cheating and anti-plagiarism policy. Please familiarize yourself with definitions and penalties. If you are in doubt about what constitutes plagiarism, ask because it is your responsibility to know. *Moreover, Kindly note that all work submitted in this course must be your own. Contributions from anyone or anything else- including AI sources constitutes an academic integrity violation.*

Refer to Student Code of Conduct Available at:
<https://aub.policytech.eu/dotNet/documents/?docid=147&public=true>

Non- Discrimination- Title IX- AUB

AUB is committed to facilitating a campus free of all forms of discrimination including sex/gender-based harassment prohibited by Title IX. The University’s non-discrimination policy applies to, and protects, all students, faculty, and staff. If you think you have experienced discrimination or harassment, including sexual misconduct, we encourage you to tell someone promptly. If you speak to a faculty or staff member about an issue such as harassment, sexual violence, or discrimination, the information will be kept as private as possible, however, faculty and designated staff are required to bring it to the attention of the University’s Title IX Coordinator. Faculty can refer you to fully confidential resources, and you can find information and contacts at : www.aub.edu.lb/title.

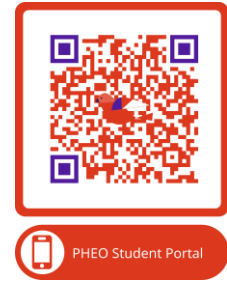
To report an incident, contact the University's Title IX Coordinator Mitra Tauk at 01-350000 ext. 2514, or at: titleix@aub.edu.lb. An anonymous report may be submitted online via Ethics Point at: www.aub.ethicspoint.

Accessible Education Office (AEO):

The Accessible Education Office (AEO) coordinates academic accommodations and services for all eligible AUB students with disabilities (such as ADHD, learning difficulties, mental health conditions, chronic or temporary medical conditions, and others). If you have a disability for which you wish to request accommodations at the department, faculty or university level, please contact AEO as soon as possible. Once you register with our office, we will assist you in receiving appropriate accommodations and will liaise with your instructors and any related entity to best support your needs. AEO is located in West Hall room 314, and can be reached by phone at 1-350000 ext. 3246 or by email: accessibility@aub.edu.lb. Information about our services can be found at: <https://www.aub.edu.lb/SAO/Pages/Accessible-Education.aspx>

Writing:

Written communication is essential for communication, health education and behavioral science. You are expected to proofread and spell-check any written documents before submission. Points will be deducted from the grades for low quality writings. You are encouraged to contact AUB's Writing Center, located in Ada Dodge Hall, 2nd floor or West Hall, 3rd floor. Appointments can be booked online: aub.mywconline.com, over the phone (Ext. 4077) or by walking in.



Public Health Education Office

Please refer to the Public Health Education Office Student Portal

Detailed course outline:

Session/ Date	Topic Lecture /discussion	Learning Objectives (LOs) & Competencies (CCs)	Assessment Mode of LOs	Reference Material
Section One Sessions				
Aug 29	A Introduction: The Environmental System: Living in a Healthy Environment (One Health Approach)	LO1 CC1-CC2	VIIA & VIB	VIII: Ref 1A- 1D
Sept 5	B The Environmental System: Life Support Systems (Geophysical, Biological and Social).	LO1 CC1-CC2	VIIA & VIB	VIII: Ref 1A-1D
Sept 12	B The Environmental System: Life Support Systems (Cont'd) (Geophysical, Biological and Social).	LO1 CC1-CC2	VIIA & VIB	VIII: Ref 1A-1D
Sept 19	C The Environmental System: Residues and Waste (e.g. Municipal Solid Waste, Hazardous Waste & Wastewater)	LO1 CC LO1 and	VIIA & VIB	VIII: Ref. 1A-1D
Sept 24 Submission of Assignment One				
Sept 26	D The Environmental System: Environmental Hazards (Physical, Chemical, Biological, Psychologic and Sociologic) in Residential and Work Settings Environmental Sustainability and Public Health	LO1 CC1 CC1- CC2 1- CC2	VIIA & VIB VII A & VIIB	VIII: Ref. 1A- 1D
Section Two Sessions				
Oct 3	A Environmental Protection & Sustainable Development	LO3 CC1 - CC2	VII A & VIIC	VIII: Ref. 2A- 2Ai 2B
Oct 10	A Environmental Factors underlying SD Goals	LO3 CC1 - CC2	VII A & VIIC	VIII: Ref. 2A-2Ai 2B
Oct 17 Class Presentations:	Environmental Factors underlying SD Goals	LO3 CC1 - CC2	VII A & VIIC	VIII. Ref. 2A-2Ai 2B

Session/ Date	Topic Lecture /discussion	Learning Objectives (LOs) & Competencies (CCs)	Assessment Mode of LOs	Reference Material
Section 1: 9:00-11:00 am Section 2: 2:00- 4:00 pm				
Section Three				
Oct 24	A Environmental Assessment and Management Tools: A- Living Planet Index and Ecological Foot Print	LO2 CC1- CC2	VIIA & VIID	VIII: Ref. 3A
Oct 31	B <i>The Cost of Environmental Deterioration and the Global Burden of Disease</i>	LO2 CC1- CC2	VIIA & VIID	VIII: Ref. 3B-3Bi
Nov 7	C/D <i>C- Risk Analysis D-Strategic Environmental Assessment and Environmental Impact Assessment</i>	LO2 CC1 - CC2	VIIA & VIID	VIII: Ref. 3C VIII: Ref. 3D
Nov 14	D/E <i>Environmental Performance</i>	LO3 CC1 - CC2	VIIA & VIID	VIII: Ref. 3E
Nov 21	Health and Environment Strategies Locally, Regionally and Globally		LO1-LO3	
Dec 5 Submission of Assignment Three				